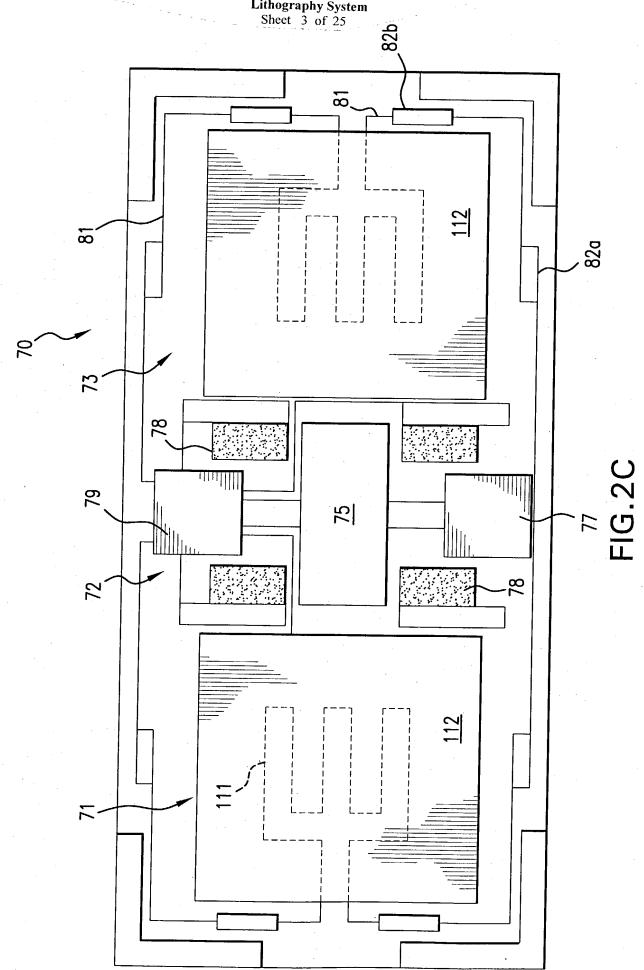


FIG.1C

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Title: Multi-Input, Multi-Output Motion Control for Lithography System

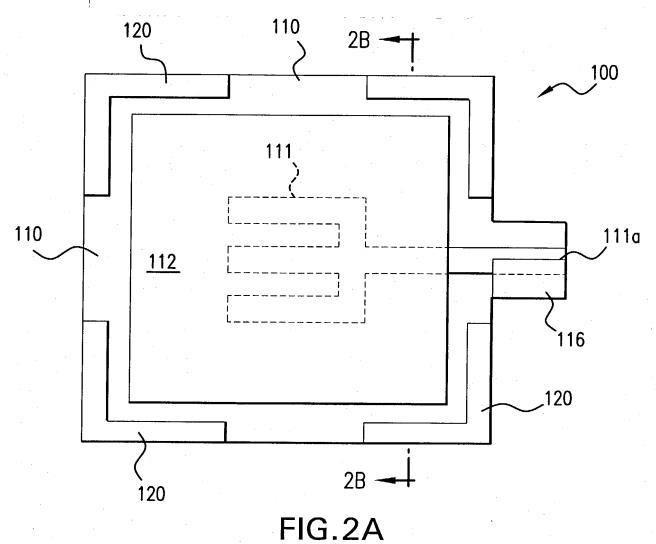
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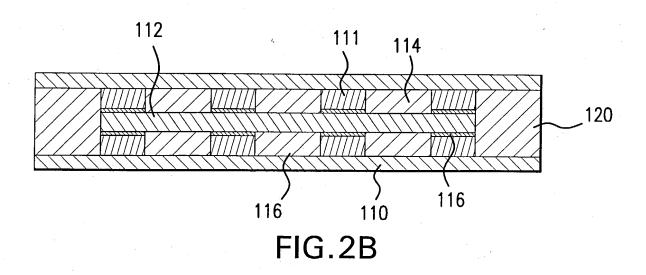


Filed: March 9, 2001

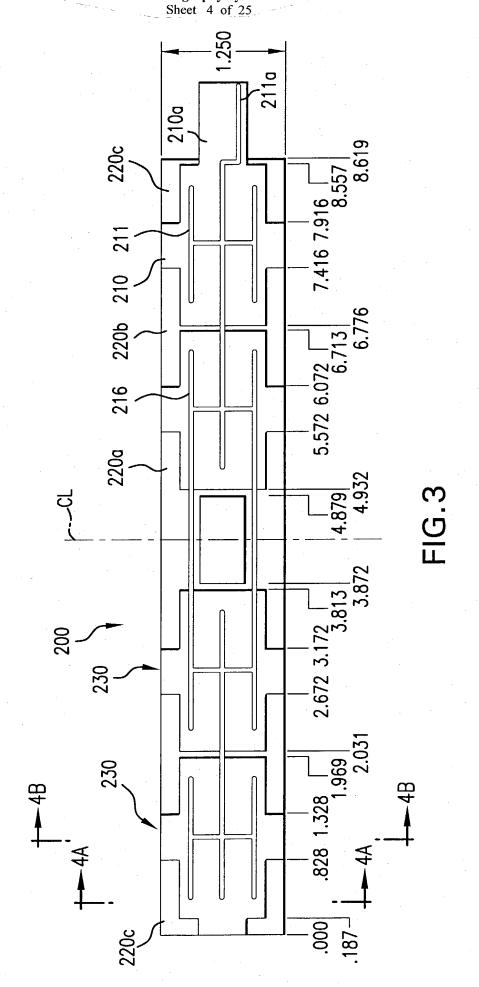
Title: Multi-Input, Multi-Output Motion Control for

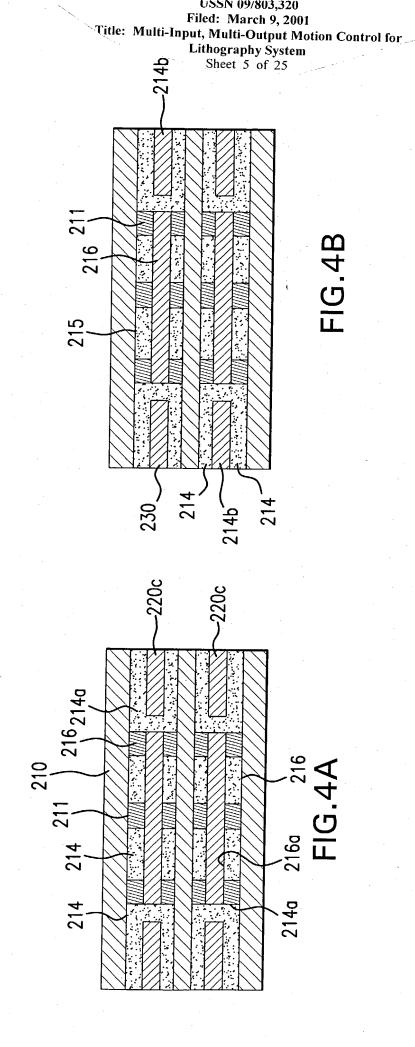
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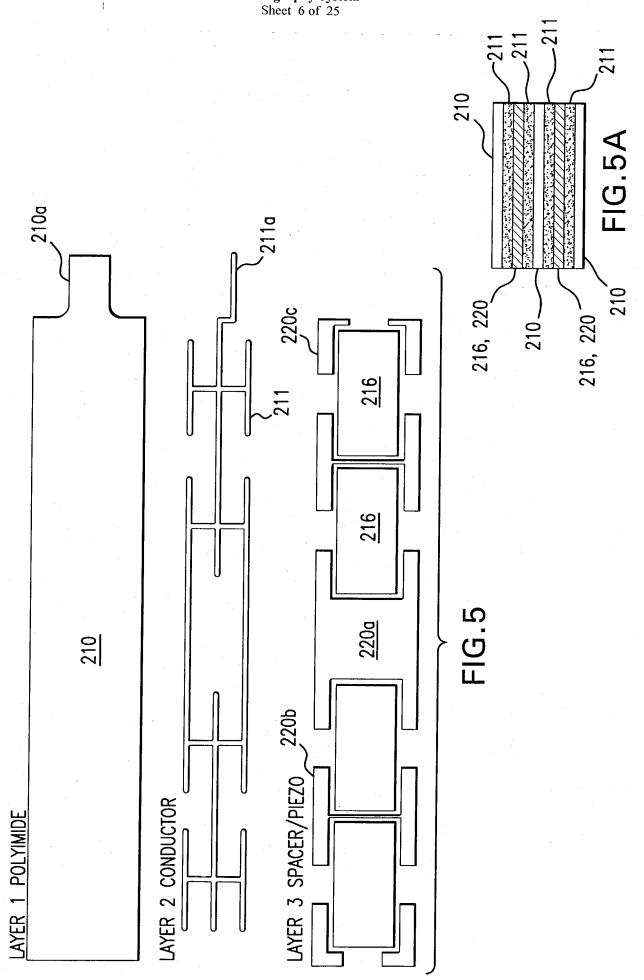
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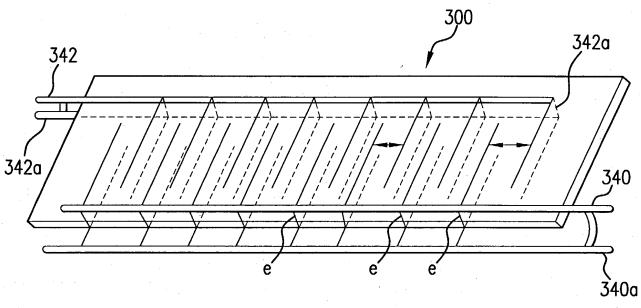


FIG.6

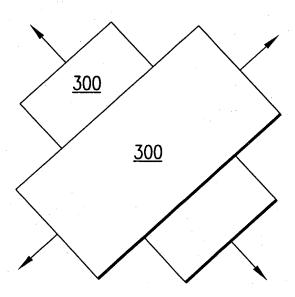
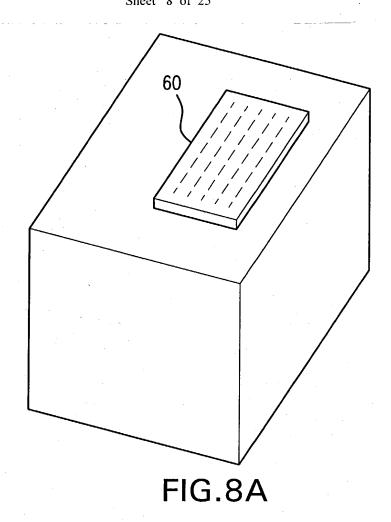
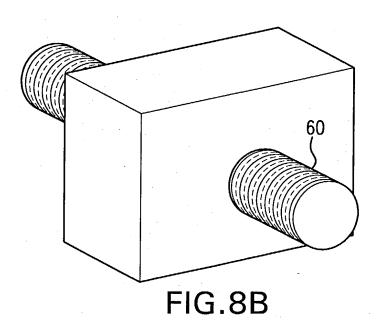


FIG.7

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Lithography System
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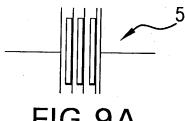


FIG.9A

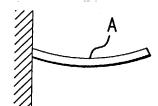


FIG.9B



FIG.9C

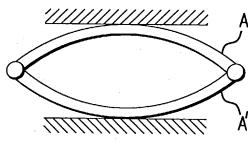


FIG.9D

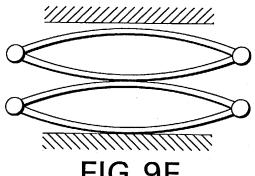


FIG.9E

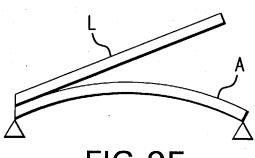


FIG.9F

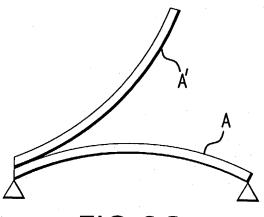


FIG.9G

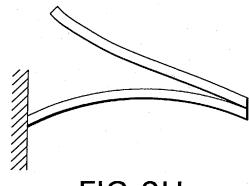
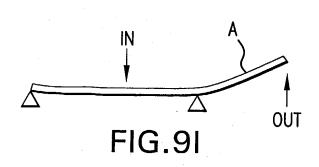


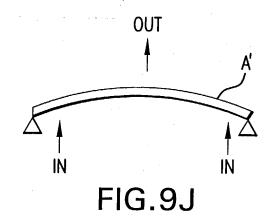
FIG.9H

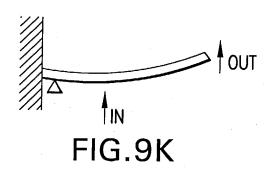
Filed: March 9, 2001

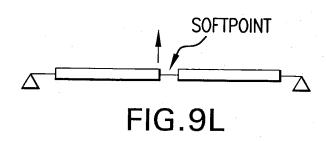
Title: Multi-Input, Multi-Output Motion Control for Lithography System

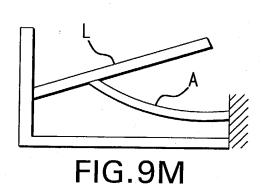
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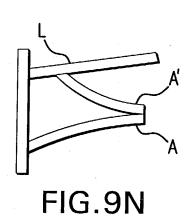


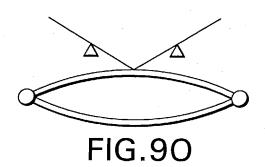












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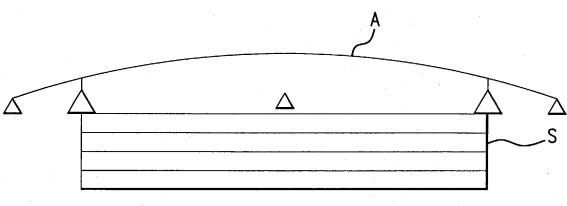


FIG.9P

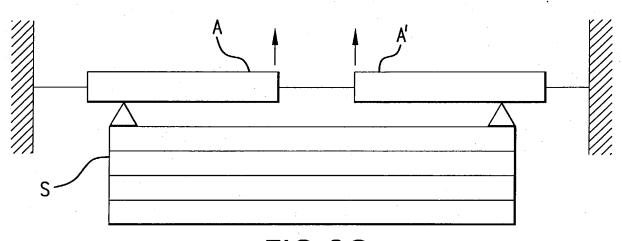
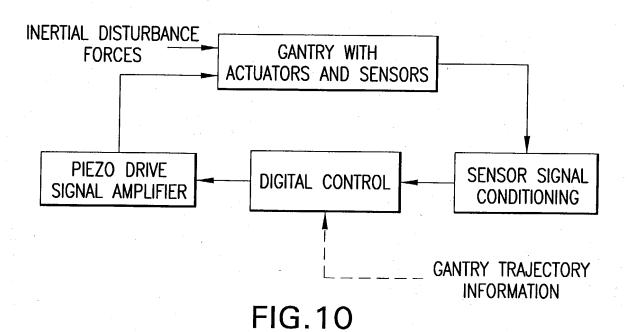


FIG.9Q

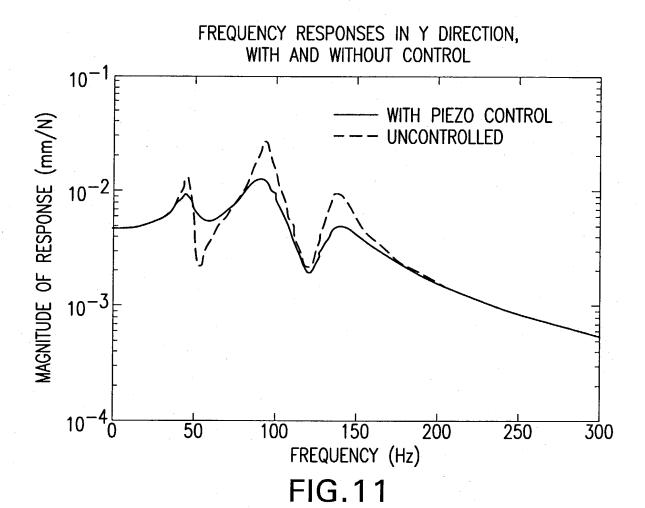
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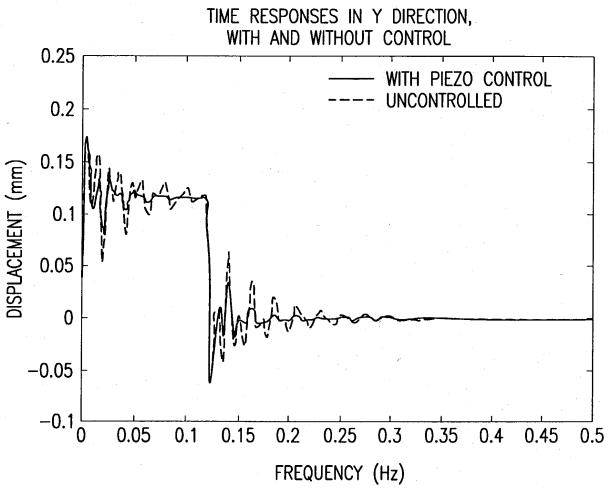


FIG.12

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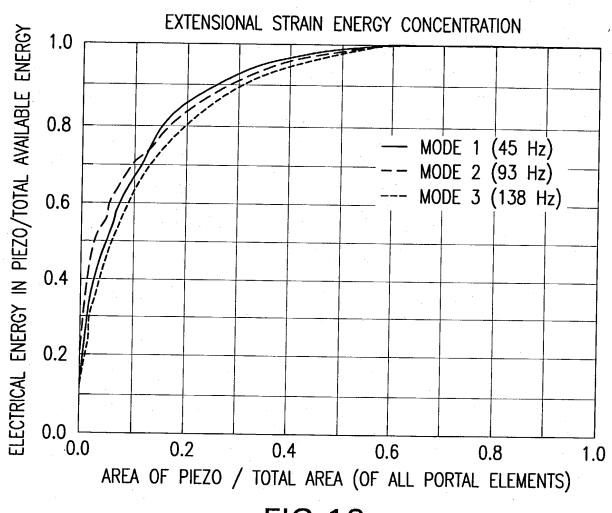


FIG.13

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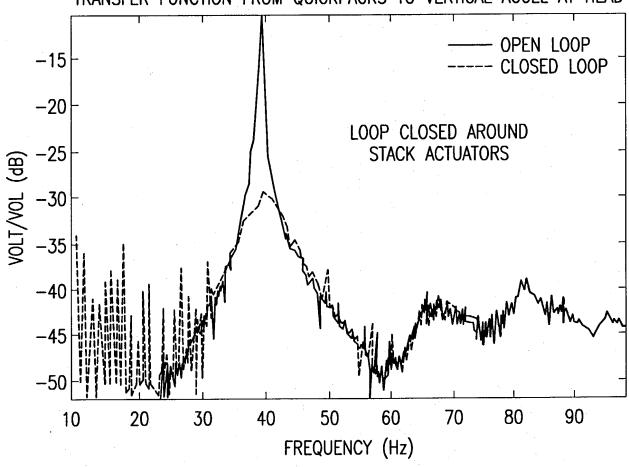


FIG.14

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TRANSFER FUNCTION FROM QUICKPACKS TO VERTICAL ACCEL AT HEAD

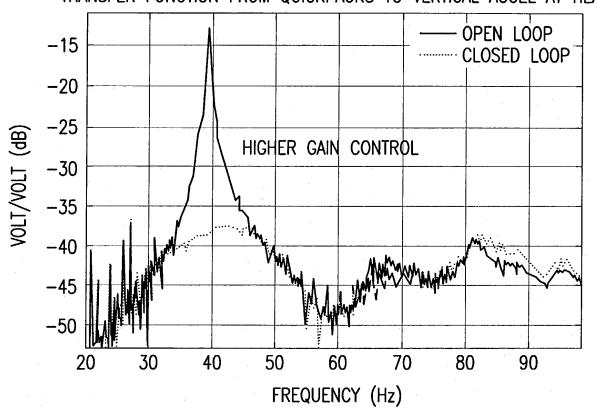
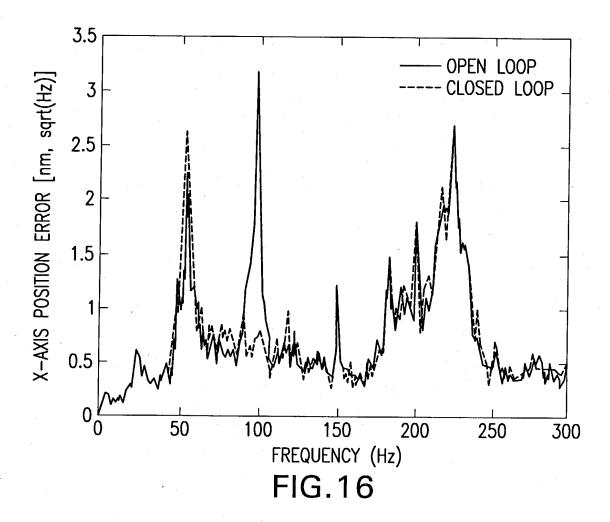


FIG.15

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FIG.17

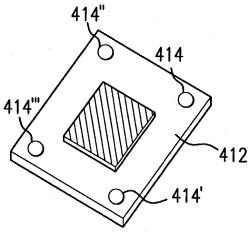


FIG.18

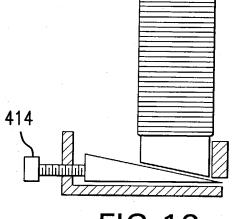


FIG.19

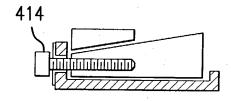
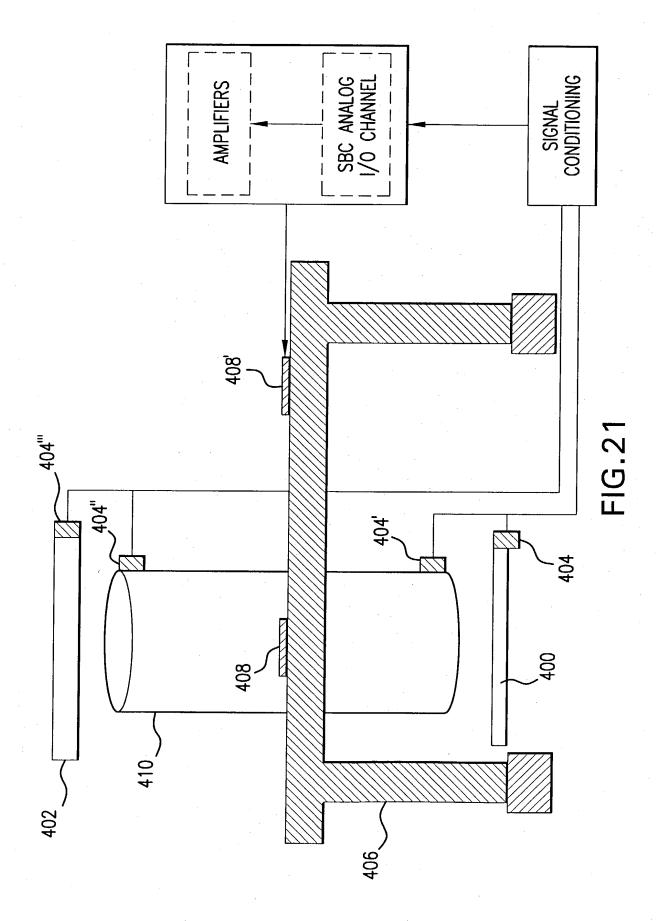


FIG.20

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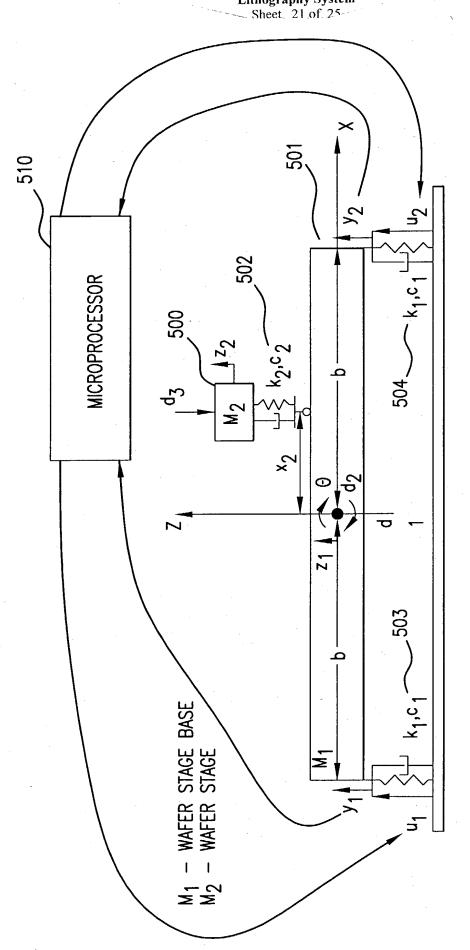
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• INPUTS (u_4) : VOICE COIL FORCES ON BASE IN Z • OUTPUTS (y_4) : LASER DISPLACEMENT MEASUREMENTS COLLOCATED WITH VOICE COIL INPUTS

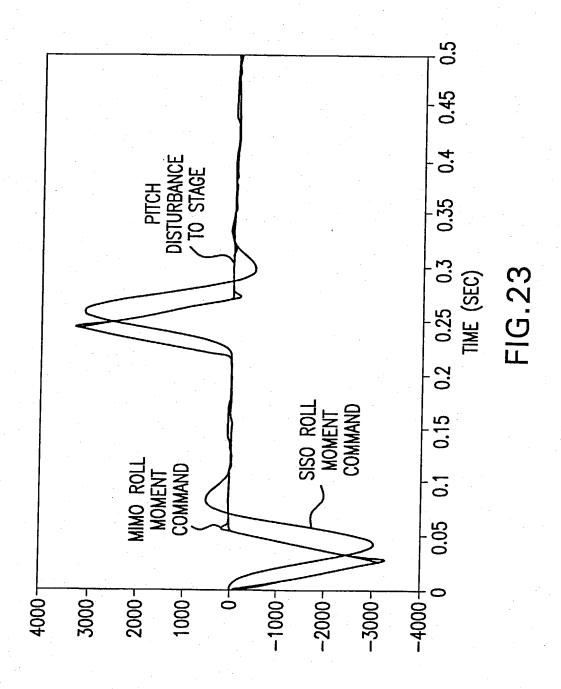
DISTURBANCES (41): Z-FORCE AND O MOMENT ON BASE, Z FORCE ON STAGE

FIG. 22

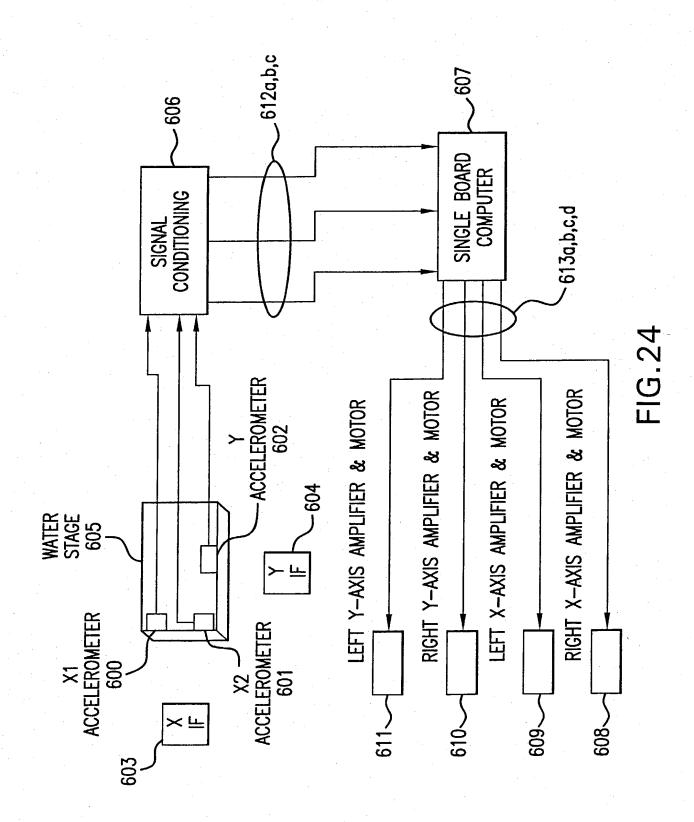
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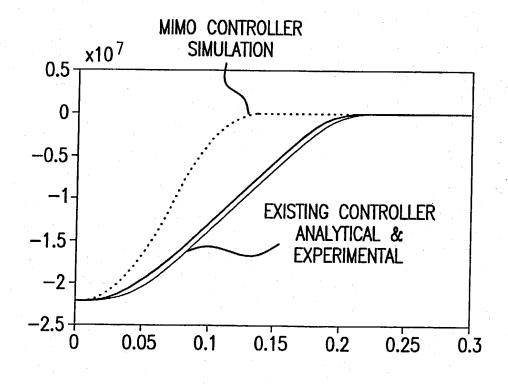


FIG.25

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Lithography System

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